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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/088,639	03/20/2002	Thomas Brodin	003300-920	7152	
21839	7590 04/07/2004		EXAMINER		
BURNS DO	ANE SWECKER & M.	HELMS, LARRY RONALD			
POST OFFICE BOX 1404 ALEXANDRIA, VA 22313-1404			ART UNIT	PAPER NUMBER	
ALLAANDI	dA, VA 22515-1404		1642		
			DATE MAILED: 04/07/200	DATE MAILED: 04/07/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
	10/088,639	BRODIN ET AL.			
Office Action Summary	Examiner	Art Unit			
	Larry R. Helms	1642			
The MAILING DATE of this communication app	ears on the cover sheet with the c	orrespondence address			
Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	86(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days fill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed on					
,					
/ 					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims					
. 4)⊠ Claim(s) <u>1-57</u> is/are pending in the application.					
4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.					
6) Claim(s) is/are rejected.					
7) Claim(s) is/are objected to.					
8) Claim(s) <u>1-57</u> are subject to restriction and/or election requirement.					
Application Papers					
9) The specification is objected to by the Examine	r.				
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.					
Applicant may not request that any objection to the					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).					
11)☐ The oath or declaration is objected to by the Ex	caminer. Note the attached Office	Action or form PTO-152.			
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).					
a) ☐ All b) ☐ Some * c) ☐ None of:					
 Certified copies of the priority documents have been received. 					
2. Certified copies of the priority documents have been received in Application No					
3. Copies of the certified copies of the priority documents have been received in this National Stage					
application from the International Bureau (PCT Rule 17.2(a)).					
* See the attached detailed Office action for a list of the certified copies not received.					
Attachment(s)					
1) Notice of References Cited (PTO-892)	4) Interview Summary				
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	Paper No(s)/Mail D 5) Notice of Informal F	ate Patent Application (PTO-152)			
 Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 	6) Other:	,			
S. Patent and Trademark Office					

U.S. Patent and Trademark Office PTOL-326 (Rev. 1-04)

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DETAILED ACTION

Election/Restrictions

- 1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-16, 34, 37, drawn to an antibody, classified in class 530, subclass 387.3.
 - II. Claims 17-28, 35, 53, drawn to a target structure of alpha 6 beta 4, classified in class 530, subclass 350.
 - III. Claims 29, 33, 36, 54 in part, drawn to a organic chemical molecule that bind a target structure, classified in class 536, subclass 6, for example.
 - IV. Claims 29, 36, 54 in part, drawn to a peptide, classified in class 530, subclass 300.
 - V. Claims 30-31, drawn to an anti-id, classified in class 530, subclass 387.2.
 - VI. Claim 32 in part, drawn to an organic molecule that blocks the function of the target structure, classified in class 536, subclass 6, for example.
 - VII. Claim 32 in part, drawn to a peptide that blocks the function of the target structure, classified in class 530, subclass 300.
 - VIII. Claim 38, drawn to a method of therapy for treating a condition based on anti-angiogenic mechanism by administration of an antibody, classified in class 424, subclass 130.1.
 - IX. Claim 39, drawn to a method of treating metastatic diseases by administrating an antibody, classified in class 424, subclass 155.1.

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- Claims 40-44, drawn to a method of in vitro histopathological diagnosis by contacting the sample with an antibody, classified in class 435, subclass
 7.
- XI. Claim 45, drawn to a method of in vitro diagnosis of a target structure, classified in class 435, subclass 4.
- XII. Claim 46, drawn to a method of in vitro determination of an antibody, classified in class 435, subclass 7,1.
- XIII. Claim 47, drawn to a method of in vitro diagnosis of a target structure and an antibody, classified in class 435, subclass 7.92.
- XIV. Claims 48-51, drawn to a method of in vivo diagnosis or imaging, classified in class 424, subclass 1.11.
- XV. Claim 52, drawn to a method of treating malignant diseases by administrating an antibody, classified in class 424, subclass 155.1.
- XVI. Claim 55, drawn to a method of treating conditions by administrating a target structure of alpha6 beta4, classified in class 514, subclass 2.
- XVII. Claim 56 in part, drawn to a method of treating conditions by administering an organic molecule, classified in class 424, subclass 1.65.
- XVIII. Claim 56 in part, drawn to a method of treating conditions by administration of a peptide, classified in class 514, subclass 2.
- XIX. Claim 57 in part, drawn to a method of assaying for an organic molecule and an antibody, classified in class 435, subclass 7.

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XX. Claim 57 in part, drawn to a method of assaying for a peptide and an antibody, classified in class 435, subclass 7.

2. The inventions are distinct, each from the other because of the following reasons:

Inventions of Groups I-VII represent separate and distinct products which have different structures, functions and are made by materially different methods. The products of Groups I-VII represent antibodies, protein, organic molecules, target structures which are all structurally distinct. The examination of all groups would require different searches in the U.S. Patent shoes and the scientific literature and would require the consideration of different patentability issues. Thus the inventions I-VII are patentably distinct.

The methods of Inventions VIII-XX differ in the method objectives and parameters and different reagents. The methods use distinct reagents such as antibodies, organic molecules and peptides and each method has a distinct objective in using the distinct reagents. Thus Inventions VIII-XX are separate and distinct in having different method objectives and parameters and reagents used and are patentably distinct.

Inventions I and VIII-XV, XIX, XX are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the antibody can

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be used in a materially different method such as to purify the antigen in addition to the materially different methods of Groups VIII-XV, XIX, XX.

Inventions II and XI, XIII, XVI are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the target structure can be used in a materially different method such as an antigen to produce an antibody in addition to the materially different method of Group XI, XIII, XVI.

Inventions III and XVII, XIX are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the organic molecule can be used in a materially different method such as an antigen to produce an antibody in addition to the materially different method of Group XVII, XIX.

Inventions IV and XVIII, XX are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the peptide can

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be used in a materially different method such as an antigen to produce an antibody in addition to the materially different method of Group XVIII, XX.

3. The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and a product claim is subsequently found allowable, withdrawn process claims that depend from or otherwise include all the limitations of the allowable product claim will be rejoined in accordance with the provisions of MPEP § 821.04. Process claims that depend from or otherwise include all the limitations of the patentable product will be entered as a matter of right if the amendment is presented prior to final rejection or allowance, whichever is earlier. Amendments submitted after final rejection are governed by 37 CFR 1.116; amendments submitted after allowance are governed by 37 CFR 1.312.

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103, and 112. Until an elected product claim is found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowed product claim will not be rejoined. See "Guidance on Treatment of Product and Process Claims in light of *In re Ochiai, In re Brouwer* and 35 U.S.C. § 103(b)," 1184 O.G. 86 (March 26, 1996). Additionally, in order

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to retain the right to rejoinder in accordance with the above policy, Applicant is advised that the process claims should be amended during prosecution either to maintain dependency on the product claims or to otherwise include the limitations of the product claims. Failure to do so may result in a loss of the right to rejoinder.

Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

- 4. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter and different classifications, restriction for examination purposes as indicated is proper.
- 5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(l).
- 6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Larry R. Helms, Ph.D, whose telephone number is (571) 272-0832. The examiner can normally be reached on Monday through Friday from 6:30 am to 4:00 pm, with alternate Fridays off. If attempts to reach the examiner by

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telephone are unsuccessful, the examiner's supervisor, Yvonne Eyler, can be reached on (571) 272-0871.

7. Papers related to this application may be submitted to Group 1600 by facsimile transmission. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The Fax Center telephone number is (703) 308-4242.

Respectfully,

Larry R. Helms Ph.D.

571-272-0832

LARRY R. HELMS, PH.D PRIMARY EXAMINER